

USB Modem User Guide

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Introduction

This Modem User Guide expands the Quick Start included with your faxmodem package and contains all the information you should need to use and troubleshoot your new modem. The Table of Contents shows the various useful sections of this User Guide.

What You Need to Use Your Faxmodem

Make sure that you have received the following items in addition to this manual:

- USB faxmodem
- Phone cord
- USB cable
- CD-ROM containing installation software and communications software.

You also need the following:

- IBM PC-compatible Pentium® 266 or faster (or equivalent), with 16 megabytes of RAM, and Windows 98SE, Me, or 2000, or a 500 MHz Pentium 3 or faster with Windows XP
- An available USB port on your computer
- Windows® 98SE, Me, 2000, XP, or equivalent operating system
- For software supplied on a CD-ROM disc, a CD drive
- A telephone jack to plug the modem into, so the modem can dial out and receive calls.

Installing Your USB Faxmodem

Note: If you have a PC and are replacing an existing *internal* modem, turn to **Appendix A: Removing an Internal Modem (page 25)** for instructions.

Installing the Drivers

We have streamlined the installation of your modem by including an InstallShield® program. **You must first run this program before you connect your faxmodem hardware.**

- 1** Your computer should be turned on. Close any applications you have running.

Insert the CD-ROM disc that came with your faxmodem into your CD-ROM drive. The CD-ROM disc should automatically start after a few seconds and display an installation screen.

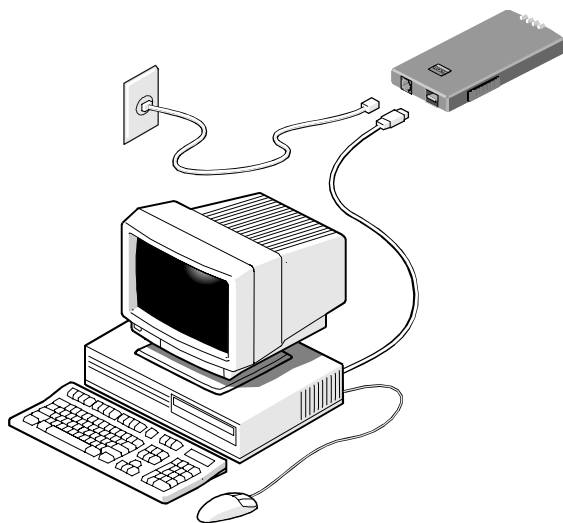
If the CD does not start automatically: Click the **My Computer** icon on your desktop; then double-click on the icon for your CD-ROM drive. If the installation program doesn't start right away, double-click **launch.exe** or **setup.exe**.
- 2** When the installation screen appears, click **Install Modem Drivers** and then **USB Drivers**.
- 3** The installation program begins. Click **Next**.
- 4** *For Windows Me/2000/XP:* Click **Finish**. Your computer shuts down.

For Windows 98SE: Your computer system drivers need to be updated. An Information box appears. Click **OK**. The Windows License Agreement box appears. Click **OK**. In a

few moments, when the Windows 98 Second Edition Q242004 Update box appears, click **Yes**. Your computer restarts. The installation program runs. Click **Next** and then **Finish**. Your computer shuts down.

Connecting the Faxmodem to Your Computer

Your computer should be shut down.



- 1** Make a note of the serial number of your faxmodem, which is located on the bottom of the case, just under the bar-code.
- 2** Connect the USB cable by plugging the cable's square end into the USB jack on the back of the faxmodem. Plug the other rectangular end into the USB connector on your computer.
- 3** Turn your computer back on.
For Windows Users: If you are using Windows 2000 or Me, you may see a dialog box stating **Digital Signature Not**

Found. You can safely ignore this message and click **Yes**. If you are using Windows XP, you may see a standard disclaimer dialog box regarding Windows logo testing. You can safely disregard this message and click **Continue Anyway**.

- 4 Connect the phone cord. Plug one end of the cord into the phone jack on the back of the modem. Plug the other end into the wall jack just as you would a telephone. See the following illustration.

Note: Use the supplied telecommunication cable or an equivalent of minimum AWG 26 line cord.

Confirming the Installation

Your computer should be turned on.

- 1 *For Windows 98/Me:* From the computer's desktop, go to **Start | Settings | Control Panel** and double-click the **Modems** icon.

For Windows 2000: From the computer's desktop, go to **Start | Settings | Control Panel | Printers and Other Hardware** and double-click the **Phone and Modem Options** icon and then click the **Modems** tab.

For Windows XP: From the computer's desktop, go to **Start | Control Panel | Printers and Other Hardware** and double-click the **Phone and Modem Options** icon and then click the **Modems** tab.

- When prompted, enter your location information.
- Click the entry for your modem and then click **Properties**.
- Set the **Maximum speed** to the highest speed available (probably 115,200). This sets the speed at which the computer communicates internally with the faxmodem.

- 2 Click the **Diagnostics** or **Modem** tab. Click **More info** or **Query Modem**. If displayed, make a note of the **Port** and

Interrupt entries.

This step also tests the modem. You will see a list of AT commands and responses, indicating that your new modem is properly connected.

IMPORTANT: If you already have a modem installed in your computer, you'll need to redirect your application software so that it recognizes your new modem. Please turn to page 15 for instructions. Otherwise, continue below.

<p>Tip: If you determine that your modem is not working, first try turning off your computer and restarting it. If restarting your computer doesn't work, please consult the Troubleshooting section on page 15.</p>
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Installing the Modem's Communications Software

The modem's CD describes the communications software package and online service included with your modem and provides easy point-and-click installation. If necessary, consult the CD's online help. Please run the modem's CD now. You should not install the drivers again, but you should install any application software you like.

If you have a V.92 modem, after you've installed the CD software, you should read the **Important Information about V.92 Modems** section of this manual on page 6. Enjoy your modem.

Important Information about V.92 Modems

With V.92, as with the earlier V.90 standard, your connection speed depends on your phone line and your Internet Service Provider (ISP). To enhance compatibility, this modem automatically detects whether to use V.92, V.90, or a slower mode when it connects to your ISP.

Your V.92 modem includes the following capabilities.

- **QuickConnect:**
A V.92 modem remembers the line conditions of the last number called, and uses this information to try to reduce connection times.
- **Modem-on-Hold:**
You have the option of receiving voice calls while online. You can answer the call and put your Internet session on hold if your ISP supports this capability and you have Call Waiting service compatible with the modem. See page 8 for more details about Modem-on-Hold.
- **Faster Upload Speeds:**
Upload speeds may be increased, from 33.6K bps to a maximum of 48K bps. (Actual rates vary, depending on line conditions.)
- **V.44 Data Compression:**
The V.44 standard lets you browse the Web and transfer data at higher speeds.

To make the most of your V.92 modem, follow these steps:

1. Contact your ISP and get the phone number of a V.92 connection to the ISP.
2. Check our web site for news of any V.92 updates. If an update is available, follow the directions below for upgrading your modem.

<p>Note: If you want to manually change the way your modem connects, please consult the AT command tables beginning on page 20 in the Troubleshooting section.</p>

Modem Upgrades

Your modem's software, or "firmware," can be easily upgraded. This is useful for code updates and feature enhancements. To upgrade your modem's firmware, download the new firmware files from our Web site and then run a program we provide. Before calling your first V.92 site, we strongly suggest that you download the latest firmware.

We also suggest that you register your modem with us so that we can notify you via e-mail when new firmware releases are available.

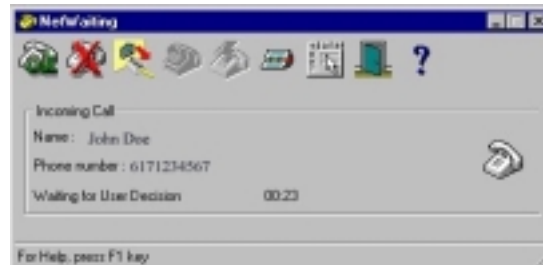
How to Use NetWaiting Modem-on-Hold

Your modem includes the NetWaiting Modem-on-Hold program from BVRP Software. This User Guide provides basic information on getting started using the NetWaiting software. For more details, please refer to NetWaiting's extensive on-line help.

Note: Your Internet Service Provider (ISP) must support the V.92 protocol; otherwise not all of the Modem-on-Hold features will work. Contact your ISP if you are unsure. Also, you must have Call Waiting to use Modem-on-Hold.

When you turn your computer back on *after* installing your modem software and hardware, you will see NetWaiting's yellow telephone icon in your computer's system tray. (If you do not see it, from the desktop go to **Start | Programs | NetWaiting**, and then select **NetWaiting** to display the icon.)

From then on, if someone calls while you are online, the NetWaiting box displays on your computer screen, offering you three choices.



- Place your Internet connection on hold and accept the call (click the **OK** icon).
- Disconnect your Internet connection and accept the call (click the red **X** icon).
- Reject the call and remain connected to the Internet (click the **Disconnect** icon).

Note: The length of time that your modem can be on hold varies depending on your ISP. Check with your provider.

Changing Your Country Setting

Our World Traveler™ country select software, also included on the CD, provides configuration information so that your modem automatically works with the telephone system in your country.

To change your country setting, follow these steps:

- 1** From your computer's desktop, click **Start | Programs | V.92 Modem | World Traveler**.
- 2** Select the country of your choice from the list and click **Set**.

Removing Your USB Faxmodem

If you ever want to remove your USB modem, follow these steps:

- 1** *For Windows 98/Me/2000:* From the desktop, go to **Start | Settings | Control Panel** and double-click **Add/Remove Programs**. Delete your USB modem. Follow the onscreen instructions and click **Finish**.

For Windows XP: From the desktop, go to **Start | Control Panel** and double-click **Add/Remove Programs**. Delete your USB modem. Follow the onscreen instructions and click **Finish**.
- 2** The **Modem Properties** or **Phone and Modem Options** dialog box will appear. Select the modem you want to uninstall and click **Remove**.
- 3** Shut down your computer and unplug your modem.

Communicating with Your Faxmodem

The faxing and communications software that came with your faxmodem sets itself up automatically and takes care of sending any necessary commands to the modem.

You should read this section, however, if you want to learn some general facts about how software works with your faxmodem, or if you intend to use your new modem with other software.

Accessing the Internet

To access the Internet and the World Wide Web, you need an online service such as America Online (AOL) or CompuServe, or an Internet Service Provider (ISP). The best place to start is the CD included with your modem package, which contains online services for you to try.

Online services provide installation software that makes signing up almost automatic. ISPs typically supply or suggest the browser software needed to access their service. They also provide additional instructions and software for setting up your account.

Note: You may need to redirect your application software to recognize your new modem; refer to the **Troubleshooting** section, page 15, if you need assistance.

Making the Most of the Fax Features

Your faxmodem includes software on the enclosed CD that enables you to send, receive, and schedule faxes. The software will also let you set up fax-back, sometimes called fax-on-demand, and issue fax broadcasts.

If you use your faxmodem for receiving faxes, keep in mind the following:

- Your computer must be running, and the communications software must be active.
- If you want to connect to your online service or ISP, you must exit the communication software first. While you are on line, you cannot receive calls or faxes.
- Some computers have a power saving option that stops the hard drive from spinning after a period of inactivity. If a call comes in, it may fail to connect while the hard drive restarts and activates the software. If this happens, you should deactivate the feature of your power saving option that stops the hard drive. See your computer's documentation for details.

Communication Setup Options

If you run into configuration difficulties with your communication software, it may be helpful to read the following section.

In setting up some older software programs, you may be asked to enter certain information. Most programs have default settings that are correct for use with this modem, and there is no need to change them. However, you should be aware of the following items:

If you are asked to select the “modem type” from a menu, and you don’t see this modem listed by name, select the most descriptive name such as **V.92 modem**, **56K modem**, or generic **Class 1 Modem**.

In the dialing directory, set all entries to the highest possible baud rate, if your software and serial port support these speeds (do not go over 115,200 bps). All communications between the computer and the faxmodem take place at this higher speed, independent of the modem-to-modem speed.

If your fax software gives you the option of selecting **Class 1** or **Class 2** fax drivers, select **Class 1**.

Initialization Strings and AT Commands

An initialization string is a group of **AT** command settings that is sent to the faxmodem as soon as you start up the software. The software determines which commands should be included in the initialization string, based on the device you select during installation. The commands remain in effect throughout the communications session, unless the software sends other commands to override them.

The software uses other **AT** command strings for all commands sent to the modem. This is transparent to you—the software does this in the background without you being aware of it.

It is sometimes necessary, however, to add other **AT** commands to initialization strings. You can find a table of **AT** commands on the World Wide Web at www.modems.com. Click **Reference** and then on **AT Command Sets**.

If your software suggests an initialization string for this modem, you should use it. If your software does not list this modem and no initialization string is suggested, use the following: **AT &F**.

Your telephone service may include Call Waiting that you can temporarily suspend by using your phone to dial a special code. (For example, in the U.S., you can disable call waiting by adding *70 to your dialing prefix; please check with your local phone company for the correct code for your area.) You can include that code, followed by a comma, in the dial string or dial prefix in your software.

If your software does not handle **AT** commands automatically, it should provide a place to enter **AT** commands in its setup menus. However, in some cases you may need to enter **AT** commands directly to the faxmodem. You must do so from a data program's terminal mode.

Refer to the **Troubleshooting** section for more tips about AT commands.

Using Terminal Mode to Enter AT Commands

Start your data communications program.

Change to terminal mode (also called command, local, direct, or dumb mode). Check your software documentation for additional instructions.

Type **AT** plus the command you need and press **Enter**. You will see an **OK** response.

When you finish, you can return to the data communications program's standard user interface. See the software program's documentation if you need help.

To return to the factory default settings for the modem, in terminal mode, type **AT &F** and press **Enter**.

Using Video

Your faxmodem supports video applications through the V.80 standard protocol so that it can be used for high-quality modem-to-modem videoconferencing. The modem is compatible with H.324 point-to-point and H.323 Internet video conferencing standards. To send videos, you need a camera and video software.

Troubleshooting

If your modem stops working, please read this section carefully before calling Customer Support. In addition, your modem CD includes a list of Frequently Asked Questions (FAQs).

Important—If Your Computer Has an Existing Modem

You must redirect your application software so that it recognizes your new modem. To do so, follow these instructions:

- **Dial-up Networking Users:**
From your computer's desktop, double-click the **My Computer** icon and then the **Dial-up Networking** icon. Double-click the **Make New Connection** icon, select your new V.92 modem from the dropdown list, and follow the prompts.
- **America Online Users:**
From within AOL, click the **Setup** button; then click the **Expert Setup** button. Select the **Devices** tab and double-click the new V.92 modem you've installed. Click **OK** and then **Close**.

Plug and Play Setup Problems with Windows

Under some circumstances, the Plug and Play setup under Windows may not resolve all installation problems. The Windows Help system has an excellent tool for thoroughly diagnosing and solving many problems.

1. On your desktop, double-click the **My Computer** icon.
2. Choose the **Help Topics** command in the **Help** menu. Windows displays the **Windows Help** dialog box.
3. Select the **Contents** tab. Note: Windows Me and 2000 include a Help Search option, which you can use instead; search for "hardware conflict," for example.

4. Click **Troubleshooters**. (For Windows 98, you will also have to click **Windows 98 Troubleshooters**.) Then click the hardware conflict help entry.
5. Follow the instructions for determining and resolving a hardware conflict.

This should solve your problem. Remember to write down your COM port setting. Return to page 10 to complete the installation.

Other Troubleshooting Tips

Problem: Your modem seems to install under Windows, but Windows cannot find it later.

Solution: If your computer has a built-in modem on the motherboard, Windows may reinstall it the next time you start up. Consult your computer's documentation or call your computer's manufacturer to get instructions on how to disable the built-in modem.

Problem: The software cannot find the modem and the modem does not respond to AT commands. (The following comment applies to many other problems as well.)

Solution: The most common problem with modems is that the communications software is not configured for the same COM port as the modem.

Check which COM port the modem is using. Make sure that the software's COM port setting matches the modem's COM port setting. From the Windows Toolbar, go to **Start | Settings | Control Panel | Modems | Diagnostics**. Click the **COM port** for your modem, then click **More info**. If Windows displays the modem's ATI responses, the modem is working.

Another problem is that COM port resources may be in use by another device. Make sure that the COM port resources used by the modem are not being used by any other device, such as a soundcard.

Problem: You type an AT command line in a terminal application and press Enter, but your modem fails to execute the command line. Or there was no response after executing a command.

Solution: Be sure you type **AT** at the beginning of the command line.

Make sure the communications software is configured for the same COM port as your modem.

Be sure your modem is not in data mode when you type the command. Use the escape character sequence to switch to terminal mode (The default escape sequence is to wait at least one second, type **+++**, and wait another second or more.)

If you typed a command but did not receive an **OK** response from your modem, the **E0** and **Q1** commands may be in effect, disabling echo and responses. Verify this with the **&V** command. To enable echo and responses, type **ATE1Q0** and press **Enter**.

Problem: The modem speaker volume is too low or too high.

Solution: Your modem has a small speaker on board that provides audible feedback of dial tones and remote connection signals ("handshaking"). This is not the same as the speaker that you may have connected to your sound card.

If the software allows you to control the volume, make sure the speaker is enabled and set to a comfortable volume.

If the software does not have speaker settings, add one of the **AT** commands listed below to the initialization string:

L1 for low volume

L2 for medium volume

L3 for highest volume

M0 to turn the speaker off entirely

For example, if you want the volume low and the software uses the initialization string

AT &F, change it to **AT &F L1**.

Problem: The modem does not automatically dial a call when you send a Dial command.

Solution: Make sure the modem speaker is turned on in your software so that you can hear dialing sounds. Also, make sure that the phone line is plugged in.

Make sure that you are dialing a valid phone number, including any required dial prefixes.

If you are using tone dialing on a line that requires pulse dialing, the line may not be able to accept tone-dialed calls. Select Pulse dialing in your software, or make sure software dialing prefix is **ATDP** (for pulse dialing).

Make sure your communications software and modem are configured for the same COM port.

Make sure your modem has hung up from the previous call. Select **Hang Up** in your software; or type **ATH** in terminal mode.

Problem: The modem can connect to some modems, but not to others.

Solution: A remote modem does not respond because of the extended negotiation process by which modems determine the best common connection between them. If this is the case, you may have to disable part or all of the negotiation process. In the following table, “protocol” means error correction and data compression.

To force different communication speeds	Type these AT commands and press Enter
Negotiate speed and protocol (default setting)	AT &F
To force protocol	AT W3
Dualmode (V.90 or V.92)—56000 bps	AT+MS=V92,1
V92 only (disable V.90)—56000 bps	AT+MS=V92,0
V.90 only (disable V.92)—56000 bps	AT+MS=V90,0
Disable both 56K and autorate on V.34—33600 bps	AT+MS=V34,1
V.34—33600 bps	AT+MS=V34,0
V.32bis—14400 bps	AT+MS=V32B,0
V.32—9600 bps	AT+MS=V32,0
2400 bps	AT+MS=V22B,0
1200 bps	AT+MS=V22,0

Notes: Some software allows these commands to be added to the list of dial prefixes or the initialization string.

When the protocol is forced, the modem will not attempt to connect at other protocols if it cannot connect at the forced protocol. It will try to connect at the fastest speed available within the forced protocol.

There are other configurations that can be forced as well. If you need to select a particular configuration, use the AT command strings shown below. You can always return to the modem's default configuration by typing **AT &F** and pressing the **Enter** key.

Remember that if you do this, the modem will not have received the commands in your software's initialization string as it normally would. Using the **ATZ** command overcomes this problem if you have saved all of your setup parameters in nonvolatile memory. (To save setup

parameters in nonvolatile memory in **AT** terminal mode: Type **AT**, followed by the parameter settings you desire, followed by **&W**, and press **Enter**. For example, if you type **AT &C1 &D2 &W** and press **Enter**, the **&C1** and **&D2** parameter settings are stored.)

To force	Type command & press Enter
MNP 5/MNP 4 operation	AT \N5
LAPM only (V.42)	AT \N4
MNP 4 only	AT \N5%C0
V.42bis data compression	AT+DCS=1,0
V.44 data compression only	AT+DCS=0,1
Auto-answer	AT S0=1

Problem: Your V.92 modem does not connect reliably at V.92.

Solution: First be sure that you have the latest modem firmware downloaded from our Web site, as discussed on page 6. Also make sure that your ISP offers V.92 at the number you are calling.

If you still have a V.92 problem, you may want to modify your Internet Connection string in Windows: On your desktop, double-click the **My Computer** icon, and then double-click **Dial-up Networking**. Right-click the existing Internet Connection that you wish to modify and select **Properties**. Click **General | Configure | Connection | Advanced**.

You can add initialization (init) strings on the line labeled **Extra Settings**. Enter *one* of the init strings listed below. Try these commands one at a time until you find the one that gives you the highest possible connection rate for your telephone line conditions.

Init String	Definition
ATW2S7=150+MS=V90 OR AT&F+MS=V92	S7 Sets wait time for remote carrier, wait time can be 1-255 seconds
AT&FS7=150	&F Sets factory defaults
AT&F&C1&D2\N5\A2=1S7=100	&C1 DCD (Data Carrier Detect) follows the remote carrier signal
	&D2 DTR (Data Terminal Ready) reacts with a disconnect, sends "OK" response and disables auto-answer while DTR signal is OFF
	\N5 MNP Error Correction Only
	\A2 Maximum block size: 192 characters

Problem: Modem-on-Hold is not working.

Solution: You may have disabled Call Waiting in your dial up networking settings. For example, in the US, if you included ***70**, in your phone number to dial, you have disabled Call Waiting.

Your ISP may not support V.92. Check with your ISP.

Confirm that you have established a V.92 connection. Modem-on-Hold will not work with a V.90 connection.

Your phone line may not have Call Waiting enabled. In order to use Modem-on-Hold, your phone must support Call Waiting. Please check with your local telephone company.

Your firmware might be out of date. Please visit our Web site to upgrade your modem's firmware.

Problem: You are using V.92 Modem-on-Hold but it disconnects you as soon as you are notified of an incoming call.

Solution: Your ISP may have set your modem “on hold” time to zero. This means that you are disconnected immediately after accepting an incoming call.

Your Modem-on-Hold software might be set to automatically disconnect. Please consult the online help included with your Modem-on-Hold software.

Problem: Your modem disconnects while communicating with a remote system.

Solution: The remote system has hung up, and you need to reconnect. The other most common sources of interruptions are Call Waiting or someone picking up an extension phone.

If you have Call Waiting, you can usually temporarily disable it by including a prefix such as ***70**, (including the comma) in the U.S., or by selecting it as a prefix in the software’s dialing directory.

Depending on your service, you may not be able to disable Call Waiting for incoming calls. If your incoming data calls are frequently disrupted by Call Waiting, you should consider dropping the service or installing a separate phone line without Call Waiting.

Note: Disabling Call Waiting prevents your V.92 Modem-on-Hold feature from working.

Problem: **Your modem does not make a connection.**

Solution: If your modem places calls but never connects, make sure you are dialing the right number and that the remote modem is turned on.

Problem: **Modem performance seems sluggish.**

Solution: If you are connected to the Internet, there may be a lot of traffic at the Web sites you are visiting. Other possible causes are lack of sufficient memory in your computer (insufficient RAM) or a slow processor (you need a Pentium® 266 or faster, or equivalent, when using Windows 98SE, Me, or 2000, or a 500 MHz Pentium 3 or faster, when using Windows XP).

Problem: **Data appears garbled on the screen.**

Solution: Your communications software character set-up (start bit, data bits, stop bits, and parity bit) does not match that of the remote system. Check your settings against those used by the remote system and make sure they match. Pay particular attention to the parity setting, as this is the most common difference among systems. You should normally use 8 data bits, NO parity, and 1 stop bit (**8, NONE, 1** or **8N1**). Another common setting is 7 data bits, EVEN parity, and 1 stop bit (**7, EVEN, 1** or **7E1**).

Problem: **You encounter communications problems with your modem.**

Solution: Check that your communications software has been set up properly. Recheck the initialization string and dial string specified in your software manual.

Memory-resident programs can cause a variety of problems. Try starting up your computer without them. Programs that can cause problems include antivirus programs and screen savers.

Appendix A: Removing an Internal Modem

If you are replacing an external modem or if your computer does not have an internal modem installed, you do not need this section.

Note: Although you do not have to remove your internal modem, we strongly recommend that you do so. Removing your old modem frees up resources.

1 Before you take out the modem, you must inform Windows that you are going to remove it:

- Click on **Start | Settings | Control Panel**. When the **Control Panel** displays, double-click the **Modems** icon.
- Now click the **Remove** button. Click **OK** to confirm that you are removing the modem.

Windows has now been informed of your intention to remove the old modem.

2 Remove the old modem as follows:

- Shut down and turn off the computer.
- Remove any cables connected to the modem.
- Open the case of the computer.
- Remove the screw that attaches the modem bracket to the computer.
- Pull the modem out of its slot.
- Replace the computer's case.

Return **Installing the Drivers** on page 1 to continue with the installation.

Appendix B: Regulatory Information

U.S. FCC Part 68 Statement

This equipment complies with Part 68 of the FCC rules. The unit bears a label which contains the FCC registration number and Ringer Equivalence Number (REN). If requested, this information must be provided to the telephone company.

This equipment uses the following standard jack types for network connection: RJ11C.

This equipment contains an FCC compliant modular jack. It is designed to be connected to the telephone network or premises wiring using compatible modular plugs and cabling which comply with the requirements of FCC Part 68 rules.

The Ringer Equivalence Number, or REN, is used to determine the number of devices which may be connected to the telephone line. An excessive REN may cause the equipment to not ring in response to an incoming call. In most areas, the sum of the RENs of all equipment on a line should not exceed five (5.0).

In the unlikely event that this equipment causes harm to the telephone network, the telephone company can temporarily disconnect your service. The telephone company will try to warn you in advance of any such disconnection, but if advance notice isn't practical, it may disconnect the service first and notify you as soon as possible afterwards. In the event such a disconnection is deemed necessary, you will be advised of your right to file a complaint with the FCC.

From time to time, the telephone company may make changes in its facilities, equipment, or operations which could affect the operation of this equipment. If this occurs, the telephone company is required to provide you with advance notice so you can make the modifications necessary to obtain uninterrupted service.

There are no user serviceable components within this equipment.

It shall be unlawful for any person within the United States to use a computer or other electronic device to send any message via a telephone facsimile unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine or of such business, other entity, or individual. The telephone

number provided may not be a 900 number or any other number for which charges exceed local or long distance transmission charges. Telephone facsimile machines manufactured on and after December 20, 1992, must clearly mark such identifying information on each transmitted message. Facsimile modem boards manufactured on and after December 13, 1995, must comply with the requirements of this section.

This equipment cannot be used on public coin phone service provided by the telephone company. Connection to Party Line Service is subject to state tariffs. Contact your state public utility commission, public service commission, or corporation commission for more information.

U.S. FCC Part 15 Emissions Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada Emissions Statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Industry Canada CS03 Statement

Notice: The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing the equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of concern. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. **Caution:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

Notice: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

Europe



Austria	Belgium	Denmark	Finland
France*	Germany	Greece	Ireland
Italy	Luxembourg	Netherlands	Portugal
Spain	Sweden	UK	

Note: EU member states with restrictive use for this device are indicated by an asterisk (*) in the table above. This device is also authorized for use in all EFTA member states (**Switzerland, Iceland, Liechtenstein, Norway**).

Important Notice for Users in France

This product should only be used on France Telecom (FT) phone lines where current limiting is not required. This is approximately 78% of all FT phone lines.

Europe - Declaration of Conformity

The manufacturer declares under sole responsibility that this equipment is compliant to Directive 1999/5/EC (R&TTE Directive) via the following:

<u>Directives</u>	<u>Standards</u>	<u>Test Reports Issued</u>
73/23/EEC-Low Voltage	IEC 60950	electrical safety
89/336/EEC-EMC	EN 55024	EMC – immunity
89/336/EEC-EMC	EN 55022	EMC – emissions

The product is CE marked.

CE Compliance Statement

Hereby Zoom declares that this modem is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Zoom vakuuttaa täten että modeemi tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Hierbij verklaart Zoom dat het toestel modem in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Bij deze verklaart Zoom dat deze modem voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

Par la présente Zoom déclare que l'appareil modem est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Par la présente, Zoom déclare que ce modem est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables.

Härmed intygar Zoom att denna modem står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Undertegnede Zoom erklærer herved, at følgende udstyr modem overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Hiermit erklärt Zoom dass sich modem in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW)

Hiermit erklärt Zoom die Übereinstimmung des Gerätes modem mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ ΖΟΟΜ ΔΗΛΩΝΕΙ ΟΤΙ ΜΟΝΤΕΜ ΣΥΜΜΟΡΦΟΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΟΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Con la presente Zoom dichiara che questo modem è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Por medio de la presente Zoom declara que el módem cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Zoom declara que este modem está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Electrostatic Discharge (ESD) Statement

This unit may require resetting after a severe ESD event.

Appendix C: Reference Information

We recommend that you take a few moments to fill in the following information for your future reference. In the event you need to call Technical Support or Customer Service, you will need the information below.

Faxmodem Model

(located on the box)

Serial Number

(located on the bottom of the modem under the bar code)

COM Port

Date of Purchase

Store or Dealer
